



What is Biodiversity?

Biodiversity is the number of species in an ecosystem, biome or on the Earth, and the variety within those species. Every organism in an ecosystem is connected to all the other organisms, therefore the reduction in biodiversity (species) causes a domino effect which can collapse entire food chains and ecosystems.

Earth's health can be determined by looking at the climate, altitudes, soils and the presence of other species in a particular area;

- the more biodiverse the Earth is the healthier 
- the healthier the Earth is, the longer it will remain sustainable 
- biodiversity is not distributed evenly on Earth
- richer in the tropics (found along the equator belt)
- as we get closer to the polar regions there is generally fewer species found (less diverse)
- when we look at global diversity areas that have large numbers of plants are also the areas that have a large amount of biodiversity

<https://www.youtube.com/watch?v=7tgNamjTRkk>





Why is biodiversity important?


- Air and water quality
- Disease control
- Natural pest control
- Prevention of Erosion
- Ecosystem sustainability
- Human sustainability

Why is biodiversity important?


• Air and Water Quality

 ☐ Plants benefits humans as the bi-product of the process of photosynthesis is oxygen ☐ a number of different plants, fish, and bacteria live in the water and perform water purification (naturally by removing nitrogen, supplying oxygen, and recycling waste)


• Disease Control

 ☐ controls the spread of disease as pathogens (viruses and bacteria) need to adapt to new species, the more biodiverse an area is the slower it will take the pathogen to spread and affect different species



• Natural Pest Control

 ☐ animals, and insects naturally eat each other so by having a variety of species to eat each other the less pests will be found

• Prevention of Erosion

 ☐ trees, plants, etc help prevent washouts and erosion of soil

• Agriculture

 ☐ humans eat about 40,000 types of plants and animals a day ☐ plants and animals are necessary to maintain human's needs for food, shelter, and clothing

What causes ecosystems to become less biodiverse?

- Endangered & Extinct species
 - * Exotic Species
- Overpopulation
- Destruction of Land
 - * deforestation
 - * monocultures
 - * pollution
 - * natural disasters
- Climate Change (global warming)
 - * CO₂ emissions

Conserving Biodiversity:

- protecting and sustaining species
 - * Laws
 - * Organizations
 - * government funding
- management of natural resources
 - * Laws
- learning to live differently
 - * Government funding
 - * Organizations
 - * research